

## Stay GUFi with Performance Regression Testing

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The Grand Unified File Index (GUFi) is an index that contains file system metadata and is designed to allow users and administrators to securely and efficiently query this metadata, while minimizing the impact on resources within HPC storage systems. Metadata is becoming increasingly more important because massive numbers of files are being stored on file systems today and file counts are only going to continue increasing. GUFi prides itself on vastly outperforming standard metadata tools, thus tracking performance improvements, or more importantly degradations, over time is vital. In order to properly detect these variations, a baseline must be established for a standard set of operations. Once a baseline is established, our solution will take the current build of GUFi and document select performance values for a fixed set of operations following each commit. Statistics from multiple runs of the same operations will be collected and can then be compared against previously recorded statistics to determine if there have been significant changes in performance. This talk will provide an overview of the current design for performance regression testing in the GUFi software suite.